

1 1. A method comprising:
2 providing current to a laser diode of an optical
3 communication system using a transistor coupled in series
4 with said laser diode between a power supply voltage and
5 ground.

1 2. The method of claim 1 including providing a
2 differential output stage coupled to drive said transistor.

1 3. The method of claim 2 including providing a
2 differential output stage coupled to gate drive said
3 transistor.

1 4. The method of claim 2 including providing a
2 differential output stage to base drive said transistor.

1 5. The method of claim 1 including providing an AC
2 coupled matching resistor.

1 6. The method of claim 1 including providing
2 parallel matching resistors coupled to said transistor.

1 7. A method comprising:
2 forming a direct modulation laser driver
3 including a transistor coupled between a power supply and a
4 laser diode; and
5 coupling said transistor to be driven by a
6 differential output stage.

1 8. The method of claim 7 wherein forming a direct
2 modulation laser driver including a transistor includes
3 forming a driver including a field effect transistor having
4 its gate coupled to said differential output stage.

1 9. The method of claim 7 wherein forming a direct
2 modulation laser driver including a transistor includes
3 forming a driver including a bipolar transistor having its
4 base coupled to said differential output stage.

1 10. The method of claim 7 including AC coupling a
2 shunt resistor to said transistor.

1 11. The method of claim 7 including providing a pair
2 of parallel shunt resistors coupled to said transistor.

1 12. A driver for a direct modulation laser
2 comprising:
3 a differential output stage;
4 a transistor driven by said differential output
5 stage, said transistor coupled between a power supply and
6 ground; and
7 a laser diode coupled in series with said
8 transistor.

1 13. The driver of claim 12 wherein said transistor is
2 a field effect transistor having its gate coupled to said
3 differential output stage.

1 14. The driver of claim 12 wherein said transistor is
2 a bipolar transistor having a base coupled to said
3 differential output stage.

1 15. The driver of claim 12 including a pair of
2 parallel shunt resistors coupled to said transistor.

1 16. The driver of claim 12 including a shunt resistor
2 AC coupled to said transistor.

1 17. A system comprising:
2 a media access control; and
3 a laser driver coupled to said media access
4 control, said laser driver including a differential output
5 stage, a transistor driver by said differential output
6 stage, said transistor coupled between a power supply and
7 ground, and a laser diode coupled in series with said
8 transistor.

1 18. The system of claim 17 wherein said transistor is
2 a field effect transistor having its gate coupled to said
3 differential output stage.

1 19. The system of claim 17 wherein said transistor is
2 a bipolar transistor having a base coupled to said
3 differential output stage.

1 20. The system of claim 17 including a pair of
2 parallel shunt resistors coupled to said transistor.

1 21. The system of claim 17 including a shunt resistor
2 AC coupled to said transistor.